

US 301 Project Development



State Contract 25-113-01



Delaware
Department of
Transportation



Federal Highway
Administration

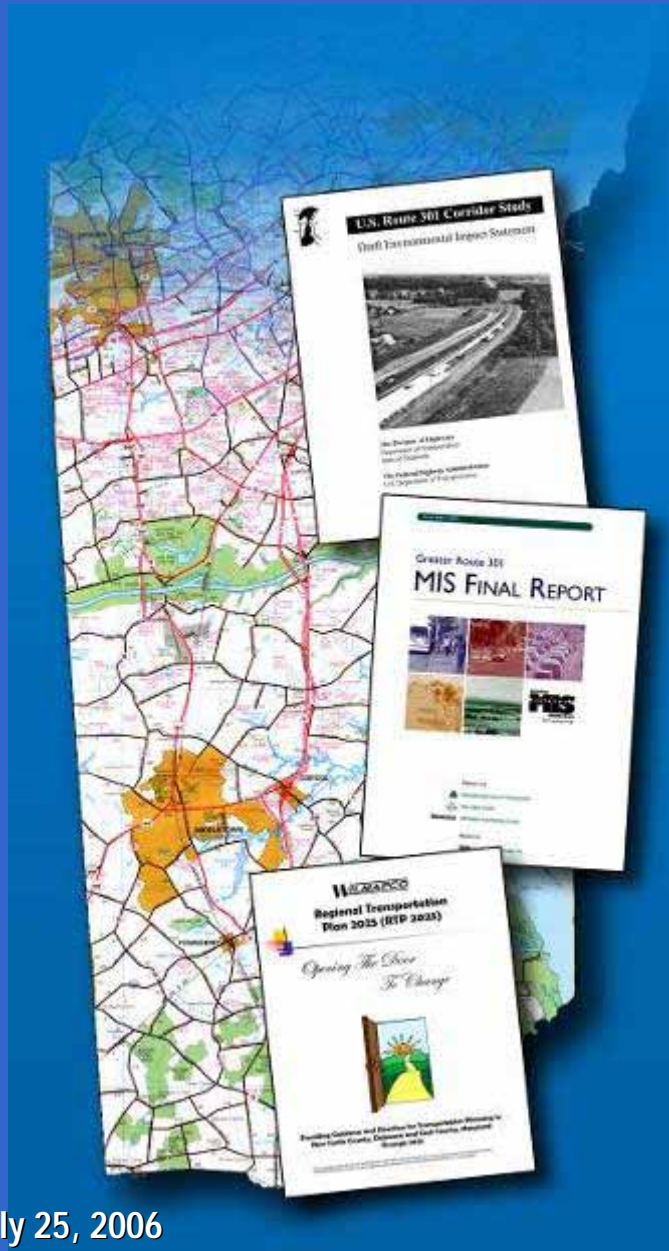


Maryland
State Highway
Administration

US 301 Toll Diversion Working Group Meeting No. 2

July 25, 2006

www.US301.org





US 301 Toll Diversion Working Group

Working Group appointed jointly by Maryland State Highway Administration (MSHA) and DelDOT on June 15, 2006

• Working Group Members

**Delaware Department
of Transportation**

Mark Tudor

US 301 Project Director

**Maryland
Transportation Authority**

Dennis Simpson

Deputy Director, Capital Planning

Town of Cecilton

John Bunnell

Mayor

Michael Cooper

*President, Cecilton
Vol. Fire Co.*

Warwick Area

Bonny Anderson

**Maryland State
Highway Administration**

Doug Simmons

Deputy Administrator

Maryland State Police

Captain Bill Dofflemeyer,

*Commander, Commercial
Vehicle Enforcement Division*

Cecil County

William Manlove

County Commissioner

Barry Janney

Sheriff, Cecil County

**Maryland State
Highway Administration**

Richard Lindsay

District Engineer

Town of Chesapeake City

Bill Kiessling

Mayor

Kent County

Roy Crow

County Commissioner

John Price

Sheriff, Kent County

Town of Galena

Harry Pisapia

Mayor

Chris Powell

*Chief, Galena
Vol. Fire Co.*



Agenda

5:30	Welcome	Bob Kramer
5:35	Opening Remarks	Mark Tudor Doug Simmons
5:45	Project Notebooks	Mark Tudor
5:50	Meeting No. 1 - Recap	Mark Tudor
6:10	Meeting No. 1 - Questions & Responses	Mark Tudor Jim Burnett
6:30	Issues & Potential Solutions	Bob Kramer Jim Burnett
7:00	Break	
7:15	Breakout Session	Working Group
8:00	Report Results / Open Discussion	Working Group
8:25	Closing Remarks	Mark Tudor
8:30	Meeting No. 3 / Adjourn	Bob Kramer



Working Group Calendar

- July 11, 2006
 - Working Group – Purpose and Guidelines
 - Getting Organized
 - Project Background Briefing
 - Traffic Analysis / Results
 - Working Group Issues
- July 25, 2006
 - Discussion of Issues, Ideas and Potential Solutions / Mitigation Measures
- August 8, 2006
 - Discuss and Finalize Working Group Recommendations
- August 29, 2006
 - If required



Notebook Contents

- TAB 1 – Meeting No. 1 Notes
- TAB 2 – PowerPoint Presentation



Recap of Meeting No. 1

Project:

- DeIDOT intends to upgrade US 301 to a 4-lane (2-lanes in each direction) limited access (expressway) toll facility
- **Late 2006:** Selection of a Recommended Preferred Alternative, along with a Draft Environmental Document and Public Workshop / Hearing
- **Spring 2007:** Federal approval anticipated



Recap of Meeting No. 1

Projected Implementation Schedule :

- 2007 - 2010: Design and Right-of-Way Acquisition / Protection
- 2010 - 2015: Construction, if full funding is available
- 2010 - 2020: Construction, if funding is phased



Project Schedule 2006-2007

Spring-Summer 2006

- Bog Turtle Phase II and III Survey & Report
 - Toll Diversion Working Group
-

Late 2006

- Recommended Preferred Alternative
 - Draft Environmental Impact Statement (DEIS) available to the public
 - Public Hearings/Workshops
-

Early 2007

- Selected Alternative / Final EIS
-

Spring 2007

- Federal Approval of Selected Alternative



Funding Status

- **2005-2007:** Funds are available for effort necessary to gain Federal approval of a selected alternative
- **2006 :** DeIDOT has requested General Assembly to authorize FY 2007 funding for detailed engineering and property acquisition to protect the selected alignment
- **2007-2010:** Design and right-of-way acquisition likely to require 4 years
- **2010-2015:** 4-6 years required to construct the total project (about 16 miles), under ideal conditions, if full funding is available
- **2010-2020:** 7-10 years required to construct the total project should limited funding require phasing the construction of the project
- \$500 to \$700 million – estimated cost of new US 301 (2005 dollars)
- DeIDOT's projected average annual capital program for FY 2006 to FY 2012 is \$303 million
- Toll Facility – Proposed to fund a portion of the cost of new US 301

Recap of Meeting No. 1

DeIDOT Goals

- DeIDOT wants the users of new US 301 to help pay for the new roadway
- DeIDOT plans to establish toll rates to:
 - Optimize toll revenues, while
 - Keeping traffic on US 301





Recap of Meeting No. 1

Comparison of Truck Characteristics

US 301

vs.

MD 213

- Predominantly through traffic
 - Predominantly commercial 18-wheelers
 - Heavy daytime and nighttime operations
- Predominantly local traffic
 - Predominantly 3-4 axle dump trucks
 - Predominantly daytime trips

Recap of Meeting No. 1

Factors That Will Discourage Traffic from Using MD 213

- Compared to the future (new) US 301 route, ■ ■ ■
MD 213 ■ is much less attractive as a travel route for trucks:

Prevailing speeds on MD 213 (2-lane road) lower than on new US 301 (4-lane freeway)

For trucks, virtually no ability to pass slower vehicles on MD 213

Multiple locations with even lower speed limits:

- Speed limit: 25 mph within Galena
- Speed limit: 30 mph within Georgetown and Cecilton
- Speed limit: 35 mph approaching US 40 (Elkton)

Several (7) Traffic signals along MD 213

- 4 south of canal,
 - 3 north of canal (some without left turn lanes – adding to delay)
 - 15 additional signals on US 40 and SR 896 between MD 213 and I-95
- Heavy trucks are slow to accelerate from stop

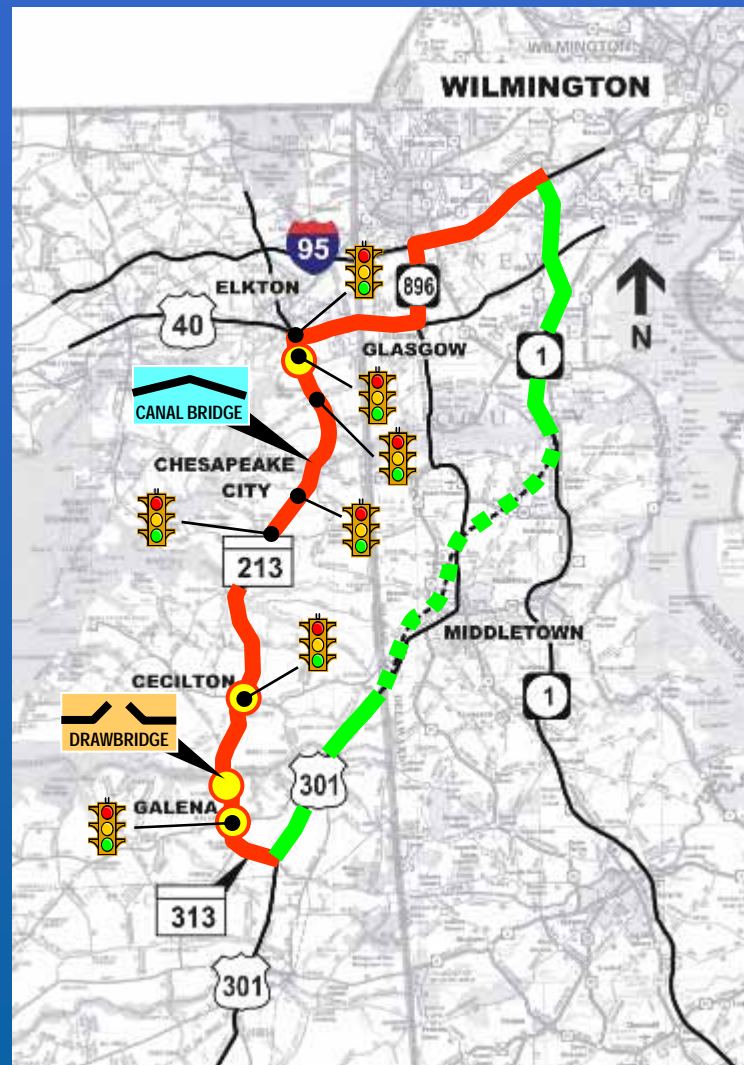
Drawbridge at Sassafras River (with steep grades on either side)

Approximately 3,800 openings per year
Majority of openings occur between April and October

Canal Bridge has steep grades and no shoulders

No access control & numerous driveways and side streets on MD 213

No capacity related improvements currently funded for MD 213, MD 310 or US 40 (between MD 213 and SR 896)





Recap of Meeting No. 1

Factors That Will Encourage Traffic to Use New US 301

- DeIDOT will provide roadway improvements to keep traffic on new US 301 (US 301 to SR 1 / I-95 (Christiana Mall))
- Travel Time Savings - New US 301 vs. MD 213 (about 30 minutes with New US 301)
- E-ZPass Use (40% and increasing)
- Highway Speed Toll Plaza for E-ZPass (no stopping)
- Nature of Truck Trips - Long Distance
- Truck Ownership - large percentage national firms
- Fuel Costs Savings

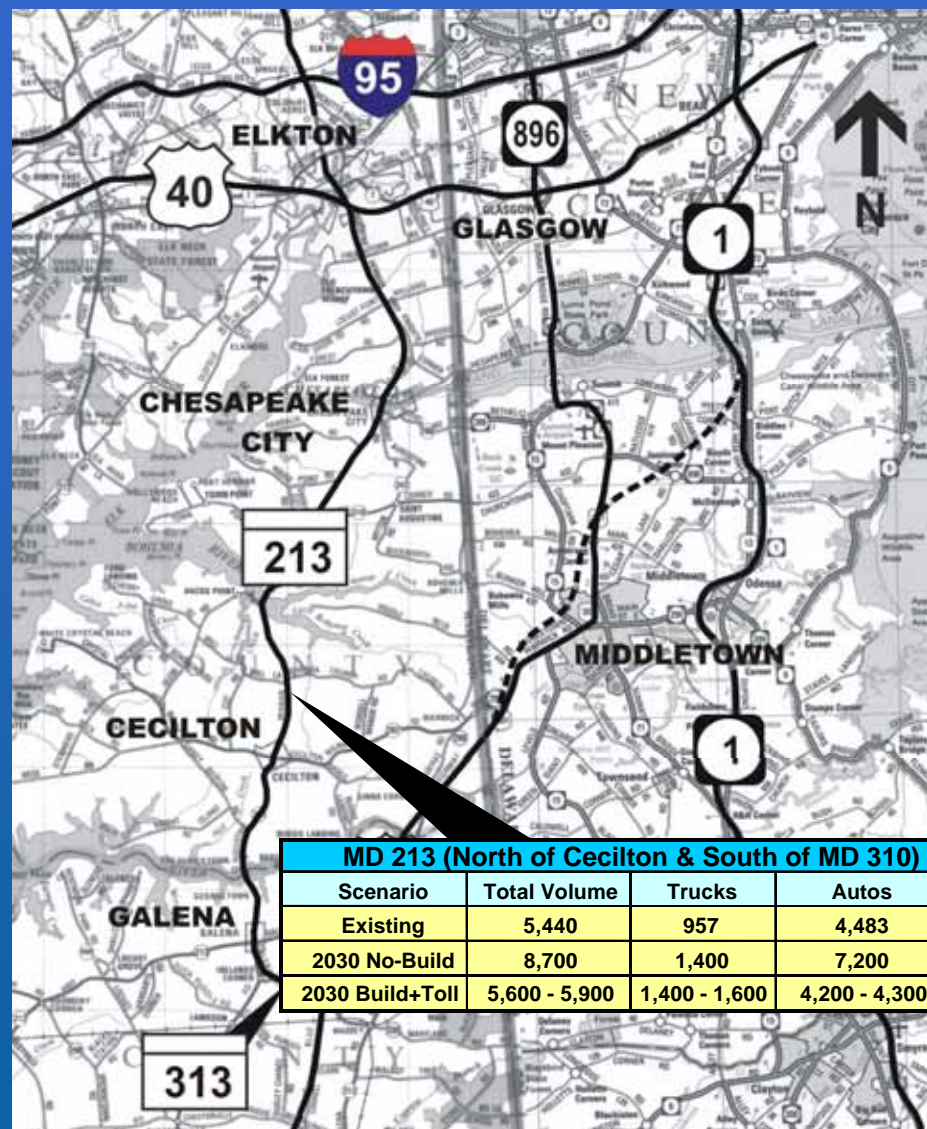
DeIDOT's near-term/ long-term program focuses on keeping traffic on New US 301

Recap of Meeting No. 1

Comparing New US 301 to No-Build in 2030

MD 213 North of Cecilton & South of MD 310

- Auto volumes would be reduced by about 3,000 vpd
- Truck volumes would increase by about 0 to 200 per day

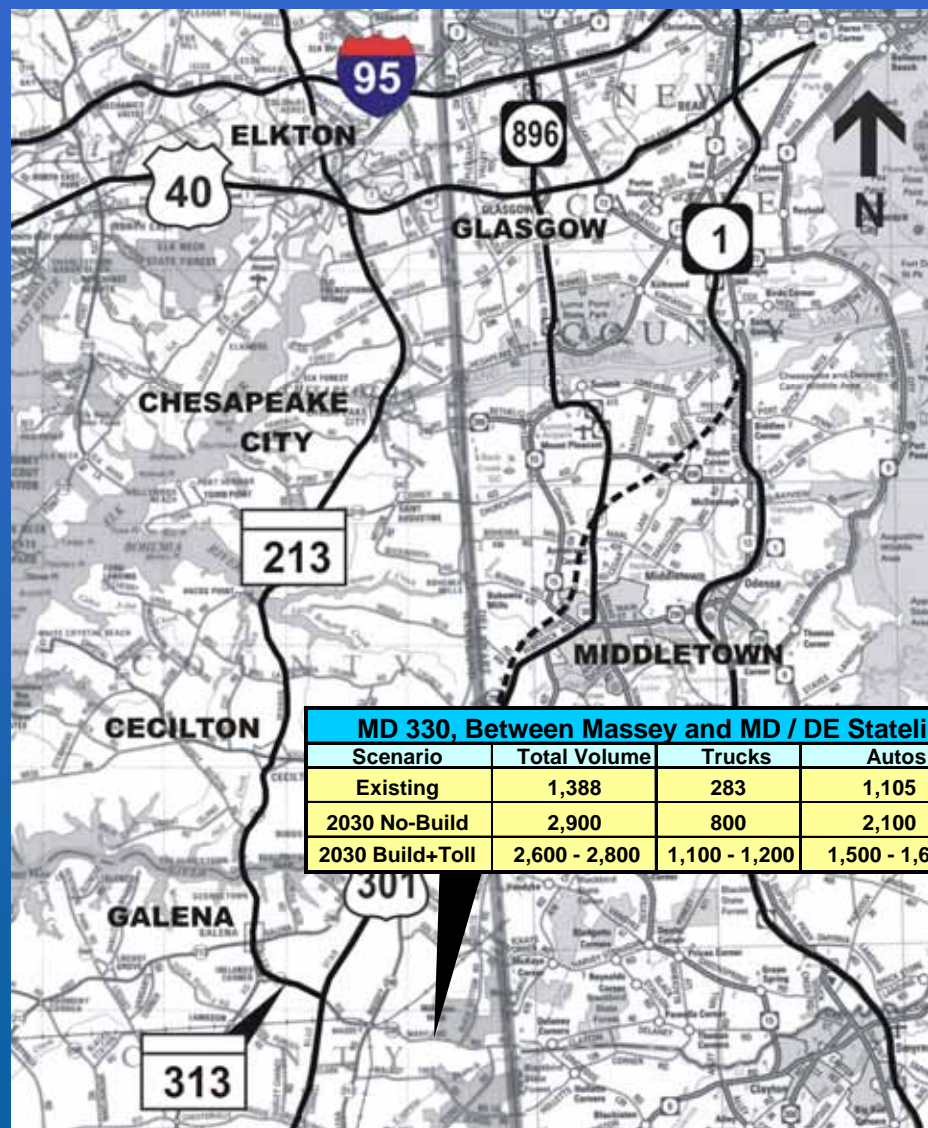


Recap of Meeting No. 1

Comparing New US 301 to No-Build in 2030

MD 330 Between Massey and MD / DE Line

- Auto volumes would be reduced by about 500 to 600 vpd
- Truck volumes would increase by about 300 to 400 vpd



Recap of Meeting No. 1

Comparing New US 301 to No-Build in 2030

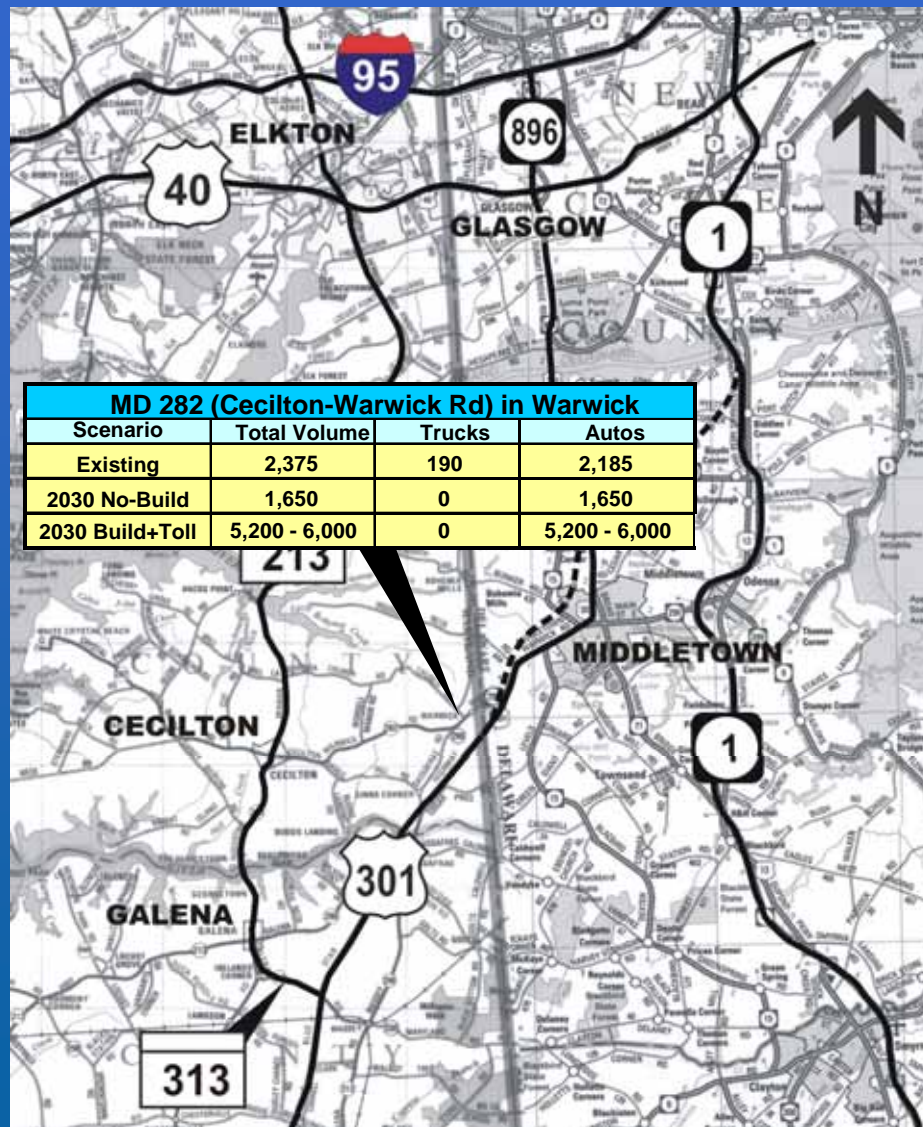
MD 282 (Cecilton-Warwick Road) in Warwick

- Auto traffic would increase by about 3,500 to 4,400 vpd

- Trucks would be restricted

(Truck restrictions would be provided on numerous local roads)

- Bunker Hill Road
- Middleneck Road
- Warwick Road
- Strawberry Lane
- Levels Road
- Green Giant Road
- Caldwell Corner Road
- Ebenezer Church Road
- Lloyd Guessford Road

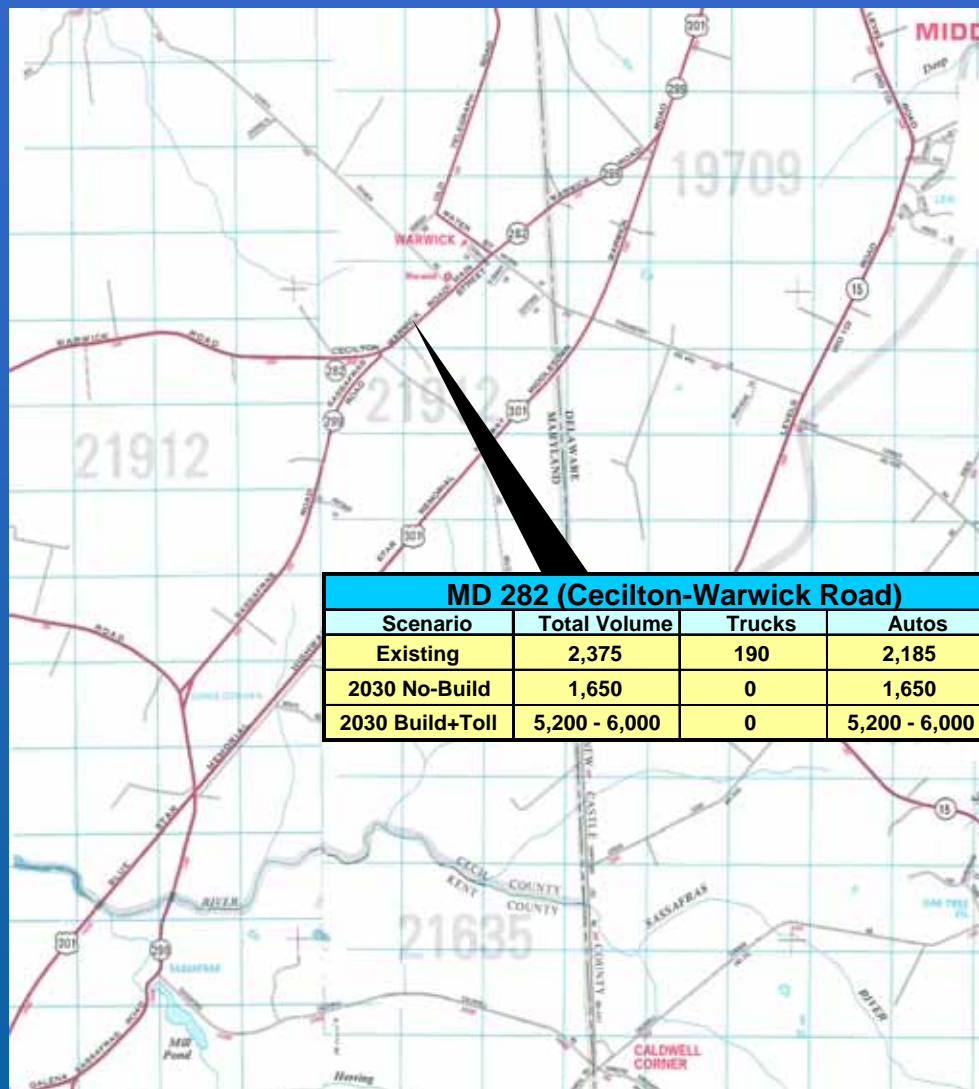


Recap of Meeting No. 1

Comparing New US 301 to No-Build in 2030

MD 282 (Cecilton-Warwick Road): continued

- Under the No-Build scenario volumes drop due to congestion in Middletown on US 301
- Without New US 301 local traffic uses MD 213 instead
- With New US 301 local traffic uses Cecilton-Warwick Road to reach US 301 rather than MD 213





Recap of Meeting No. 1

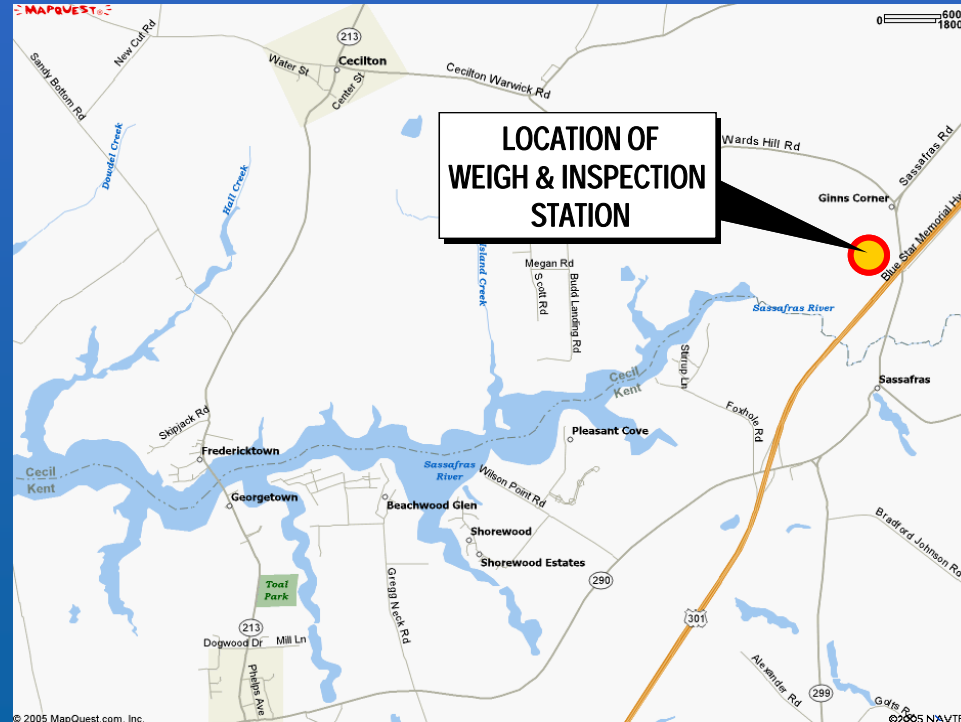
Independent Traffic Review

- Gannett Fleming is conducting an independent assessment of DelDOT's traffic data, model, analysis, and projections for SHA
- Preliminary findings and recommendations include:
 - Using updated socioeconomic data further refining the roadway network and it's attributes within the study area that allows for better connectivity.
 - These refinements provide improved loadings onto the network, especially along MD 213 and its major crossings.
 - Improve the overall assignment of the model, and improve its reliability.
- Suggestions made to date have either been addressed or are being satisfied as model refinements are made.
- The independent assessment will continue until the final model becomes available, and tests in toll sensitivity are evaluated.
- The collective assessment of the engineers working on the model is that these refinements should result in changes to the currently available traffic projections of less than 20%.
- More likely the new projections will be less than those available now .

Recap of Meeting No. 1

Maryland Truck Weigh and Inspection Station

- Preliminary site preparation complete (southbound US 301 at MD 299)
- To be operational by the fall of 2006
- Staffing by MSP



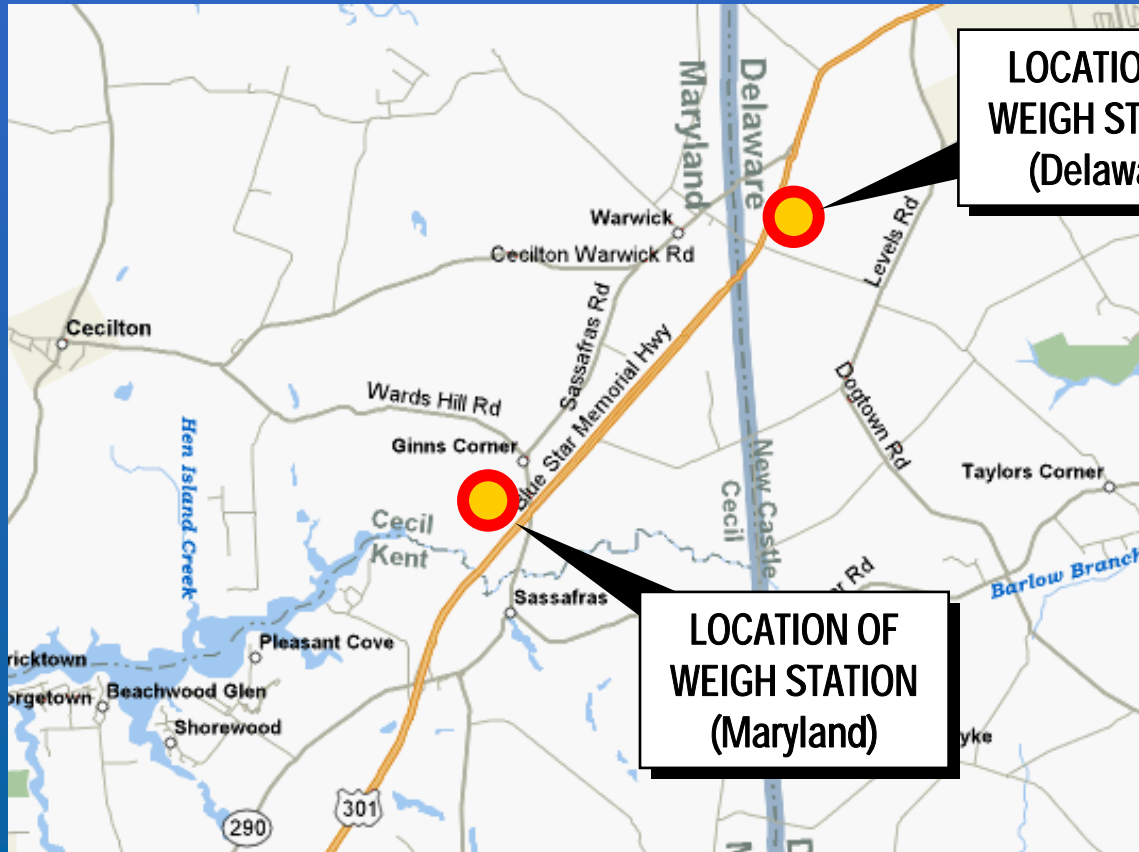


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- LOCATION OF
WEIGH & INSPECTION
STATION**
- LOCATION OF
VIRTUAL WEIGH
STATION**
- © 2005 MapQuest.com, Inc. © 2005 NAVTEQ

Recap of Meeting No. 1

Delaware Truck Weigh and Inspection Station

- Site has been identified and purchased (northbound US 301 just north of State Line)
- Design to be completed in November 2006
- Construction scheduled to commence in Spring 2007
- Operations anticipated in Late 2007 / Early 2008





Questions & Responses

Meeting No. 1



Questions & Responses - Meeting No. 1

Q1: Will traffic use MD 285 or MD 286 to avoid a toll?

A: Projections indicate that traffic volumes on MD 285 and MD 286 would be lower with a new tolled US 301 than under the No-Build scenario.

Q2: Does Maryland have any plans to improve MD 213 between the C&D Canal and US 301?

A: There are no planned capacity improvements, except for local intersection improvements as required; MSHA will address safety issues, but does not anticipate capacity improvements.

Q3: US 301 improvements will stimulate people to move to Maryland's eastern shore and commute to Wilmington, Philadelphia, etc.; Cecil and Kent (MD) Counties will get more development.

A: Land Use decisions are a local matter not a State matter. However, the toll on US 301 may discourage its use by local traffic, which could also discourage development.

Q4: What will Maryland do to meet the needs of its citizens that will be generated by what happens in Delaware?

A: The purpose of the Working Group is to identify potential issues and solutions associated with a new US 301 in Delaware. MSHA plans to implement a virtual weigh station with enforcement, with or without a new US 301 in Delaware. Traffic growth on MD 213 is projected to occur with or without a new US 301 in Delaware. MSHA does not anticipate that added capacity on MD 213 will be required to accommodate the projected growth but will make improvements at intersections along MD 213, as required to accommodate traffic growth. Identified safety needs will receive priority attention.



Questions & Responses - Meeting No. 1

Q5: Did Delaware include truck rest areas as an incentive to get truckers to use US 301?

A: No, but DelDOT would be willing to consider such a facility

Q6: Where will the Delaware truck weigh station be located?

A: On northbound US 301, just north of the MD/DE Line.

Q7: The toll will not cause diversions; truck weigh stations will cause diversions.

A: Projections show that the toll will cause some diversion of traffic. It is also understood, but difficult to predict, that potential diversion of trucks will occur during the operation of MSHA's and DelDOT's proposed weigh stations. It is anticipated that the Working Group will develop recommendations to minimize potential toll and weigh station diversions.

Q8: While there are presently weight limits on South Sassafras Road, there are no weight limits on the north section of Sassafras Road, will they be considered?

A: Axle-based truck restrictions will be considered on several local roads in Delaware and possibly in Maryland, including Warwick Road (the extension of Sassafras Road). DelDOT and MSHA are looking to the Working Group for suggestions.

Q9: Will truck restrictions be noted in the US 301 environmental documents?

A: Yes.



Questions & Responses - Meeting No. 1

Q10: Will restrictions have negative impacts on farm equipment and trucks that need to use the roads on which restrictions would be placed?

A: No, it is anticipated that this will be handled through signing and enforcement.

Q11: Will the entire length of a road have truck restrictions, not the shorter segments indicated on slide 55?

A: MSHA and DelDOT will work together on this issue.

Q12: Does any of the traffic data provided consider new growth?

A: Yes, the traffic models are required by federal regulations to use the latest approved population and employment projections (WILMAPCO). These projections are developed for traffic zones, not for individual developments. The model shows a population growth of 3,900 people and 1,200 new jobs by 2030 in the Cecilton / Galena region, corresponding with about 16,000 new vehicle trips per day. The land use projections are developed by WILMAPCO in conjunction with local planning staff.

Q13: Is the new distribution center at Elkton in the model?

A: See above response.

Q14: Is future development that will result from municipal annexation included in the model?

A: See above response.

Q15: Are the locational arrows on the maps shown correctly, specifically the "north of Cecilton" box?

A: The directional arrows at two locations have been corrected, the title clarified, and replacement pages provided to the Working Group.



Questions & Responses - Meeting No. 1

Q16: Traffic “flies” through the Warwick area going between US 301 and Cecilton – more traffic is one matter, but the more relevant issue is the speed of that traffic.

A: Traffic speed through Warwick is an issue the Working Group will likely consider and develop recommendations to address.

Q17: Traffic will increase on the east-west routes between MD 213 and new US 301.

A: Projections with a new US 301 show this to be correct for local auto traffic through Warwick.

Q18: What will MSHA do to address the conditions that will impact us with or without a new tolled US 301?

A: The purpose of the Working Group is to discuss potential issues and solutions resulting from a new US 301 toll facility in Delaware. Maryland transportation officials are active in the Working Group.

Q19: Why was the current location of the Maryland weigh station selected?

A: For several reasons:

- To identify overweight trucks as soon as possible after they enter MD
- SHA already owned land at that location
- To minimize the number of potential diversion routes around the weigh station

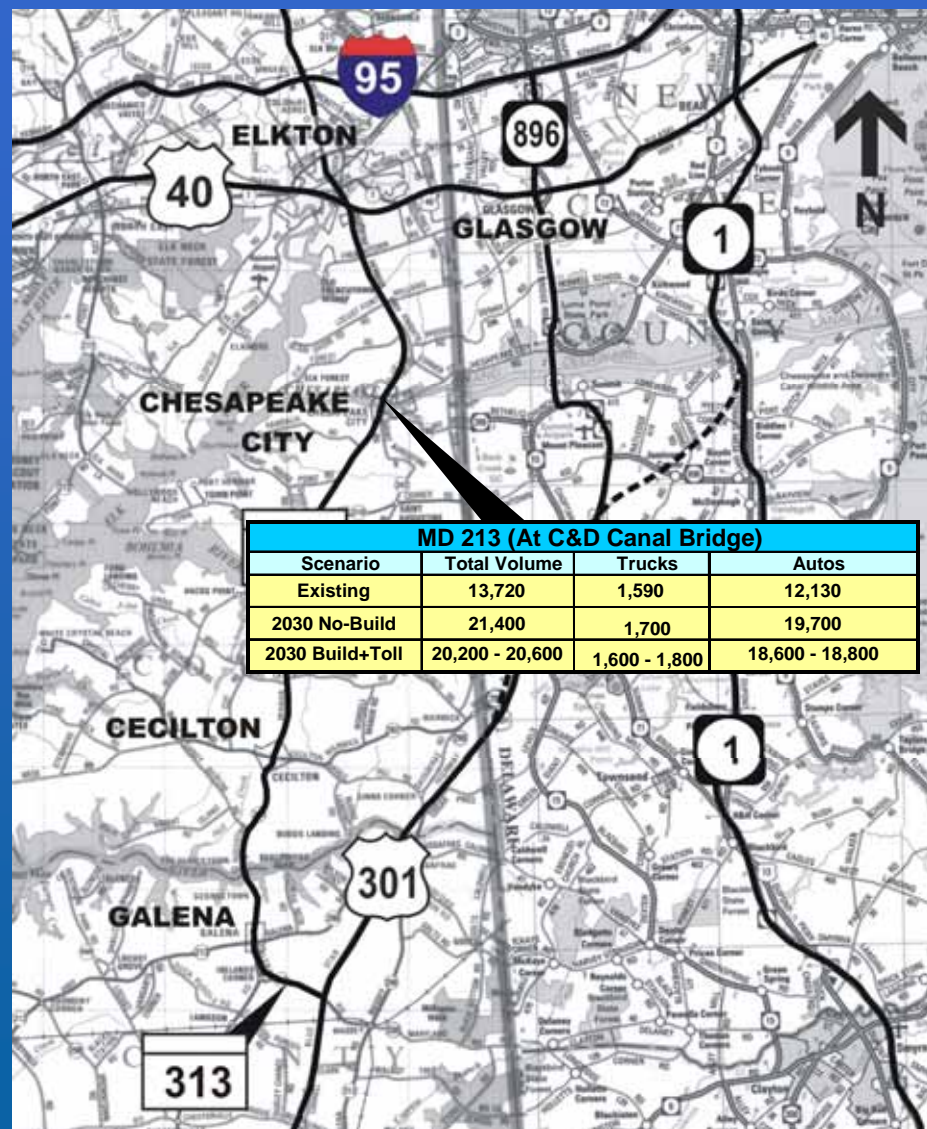
Questions & Responses - Meeting No. 1

Q20: Are there traffic projections for MD 213 in Chesapeake City?

A: Comparing New US 301 to No-Build in 2030:

MD 213 at the C&D Canal Bridge

- Auto volumes would be reduced by about 900 to 1,100 vpd
- Truck volumes would vary between a decrease (100 vpd) to an increase of about 100 vpd



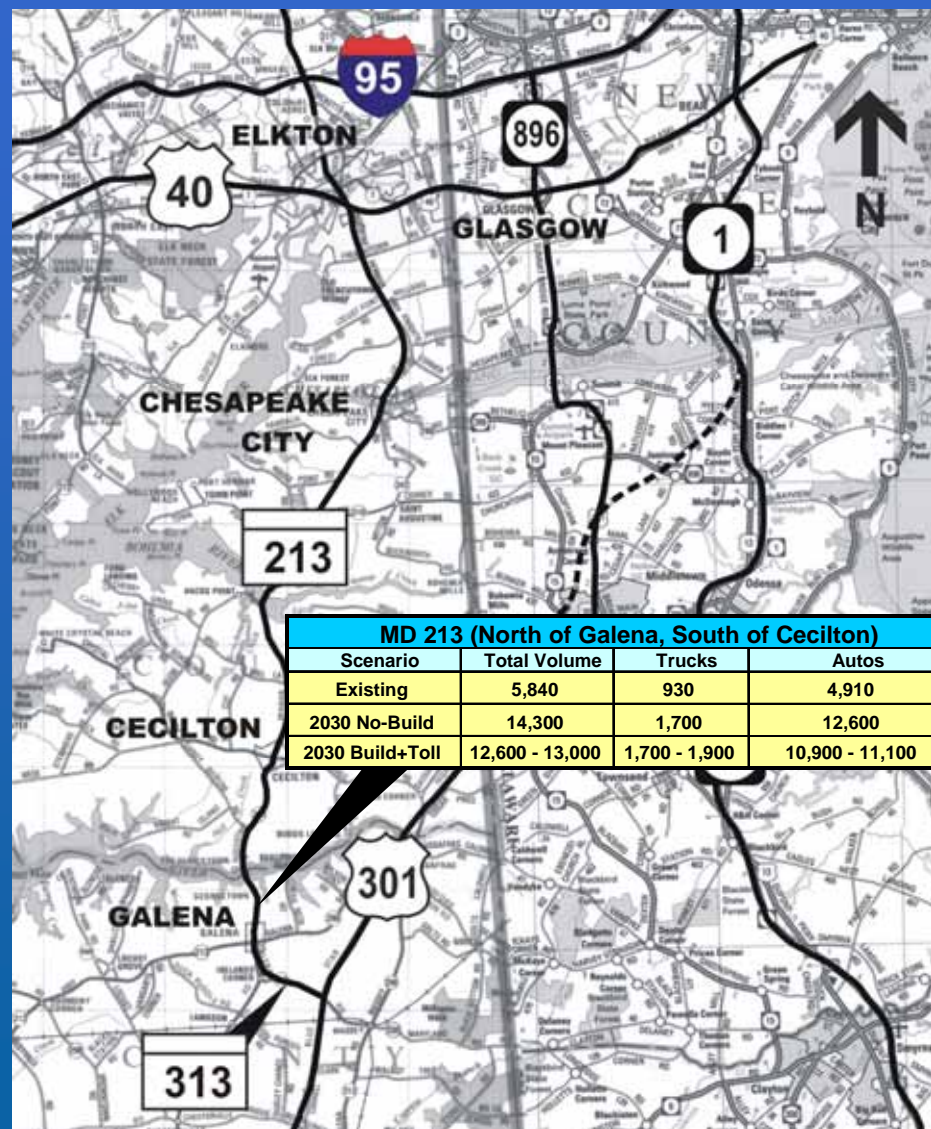
Questions & Responses - Meeting No. 1

Q21: What will be the traffic increase in Galena?

A: Comparing New US 301 to No-Build in 2030

MD 213, North of Galena and South of Cecilton

- Auto volumes would be reduced by about 1,500 to 1,700 vpd
- Truck volumes would increase by about zero to 200 vpd



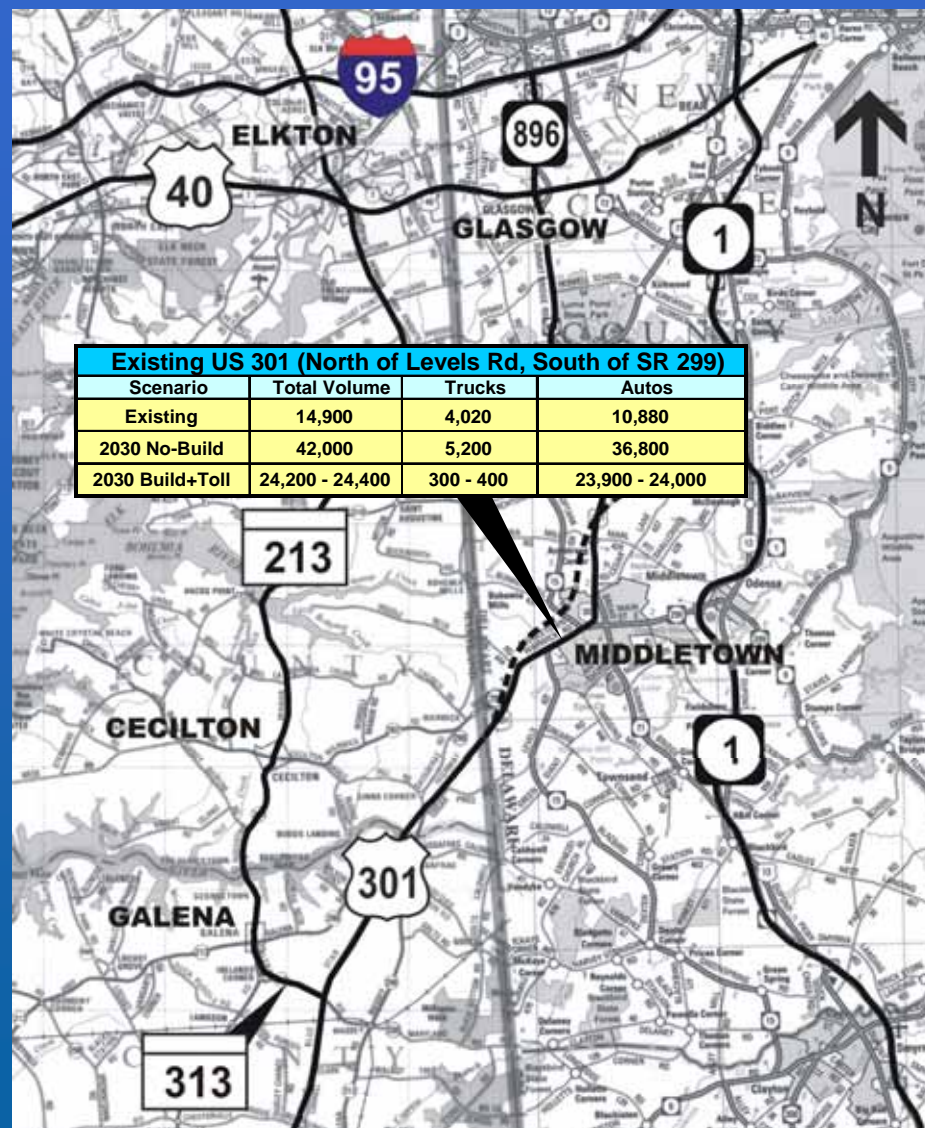
Questions & Responses - Meeting No. 1

Q22: Are there traffic data/projections to show how existing US 301 will be used after new US 301 is built and the impact on local roads?

A: Comparing New US 301 to No-Build in 2030

Existing US 301, north of Levels Road and south of SR 299 in Delaware

- Auto volumes would be reduced by about 12,800 vpd
- Truck volumes would be reduced by about 4,800 vpd





Issues & Potential Solutions



Issues & Potential Solutions

- Initial ideas from Toll Diversion Technical Team
- Based on concepts discussed at first Working Group meeting and professional experience
- These ideas are a starting point for Working Group discussion, not an exhaustive or comprehensive list
- We need your feedback on these ideas and your additional suggestions.

Issues & Potential Solutions

- SHA - Weigh Station (US 301 Southbound at MD 299)

- **Operational: Fall/Late 2006**

- 16 hours/day (alternate hours)*
- 5 days/week (alternate days)*
- Double enforcement in staff

* initial operations more intense

- **Potential Mitigation - traffic counts to determine diversions**

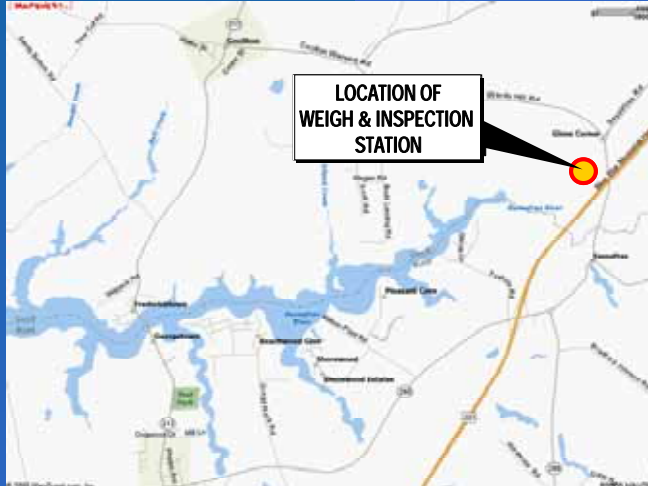
- Traffic Count Locations:

- 301 at State line
- Sassafras - Caldwell Rd.
- SR 6 between SR 15 and SR 42
- 213 north of Galena, south of Sassafras River
- SR 300 west of SR 313
- MD 310
- MD 282

- Count Timing – Before and After weigh station opening

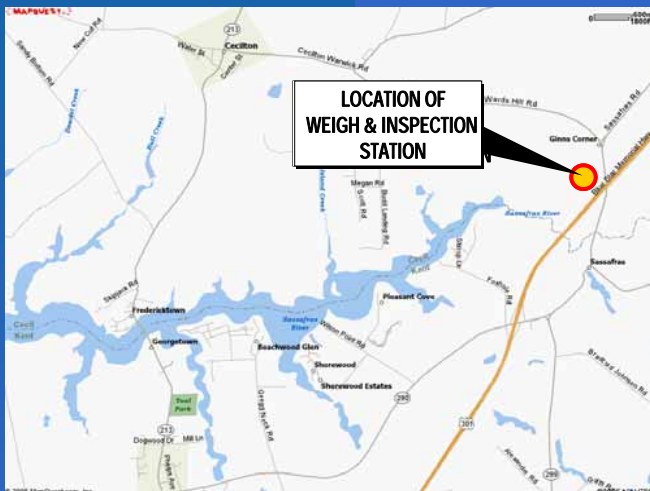
- Sept/Oct 2006
- Immediately after opening
- April/May 2007

- Traffic count results will be provided to community leaders



Issues & Potential Solutions

- SHA – Weigh Station (US 301 Southbound at MD 299) (continued)
 - Potential Mitigation - Virtual Weigh Stations



- Locations:
 - **Proposed** - Southbound MD 213 between Cecilton and Galena
 - **Potential** - Westbound Sassafras Road
 - **Potential** - Westbound SR 6 between SR 15 and SR 42
- Timing: To be determined
- Enforcement / Operations:
 - Ideal pull-off area:
 - ✓ ½ mile downstream of WIM
 - ✓ Safe shoulder width for inspections with parking for out-of-service trucks
 - ✓ At minimum → safe shoulder width for inspections
 - MD State Police prefer web-based communication (to access DE WIM data)
 - Capital Cost: \$500K per site (need details from MD)
 - Operating Cost: \$_____k per site

- SHA - Weigh Station – CVISN
(Note: Maryland has signed contracts with PREPASS)

- **Operational:**

- Accredited/underweight trucks can bypass station at full speed
- Non-accredited/underweight trucks enter station, but can bypass at reduced speed
- Overweight/suspicious trucks can be subject to full inspection (45+/- minutes)

Issues & Potential Solutions

- DeIDOT Weigh Station (US 301 Northbound at MD/DE Line)

- Operational (Late 2007 / Early 2008)

- 8 hours/day
- 5 days/week

- Potential Mitigation – Traffic Counts to determine diversions

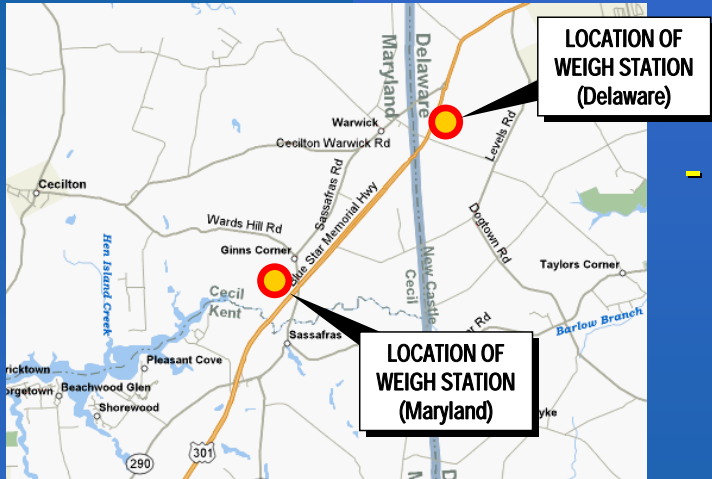
- Traffic Count Locations

- US 301 @ State line
- Sassafras Caldwell Rd.
- SR 6 between SR 15 and SR 42
- MD 213 north of Galena, south of Sassafras River
- SR 300 west of SR 313
- MD 310
- MD 282

- Count Timing – Before and After weigh station opening

- Fall 2007/Spring 2008
- Immediately after opening
- Summer 2008/Fall 2008

- Traffic count results will be provided to community leaders



Issues & Potential Solutions

- DeIDOT Weigh Station (US 301 Northbound at MD/DE Line) (continued)

- Potential Mitigation - Virtual Weigh Stations

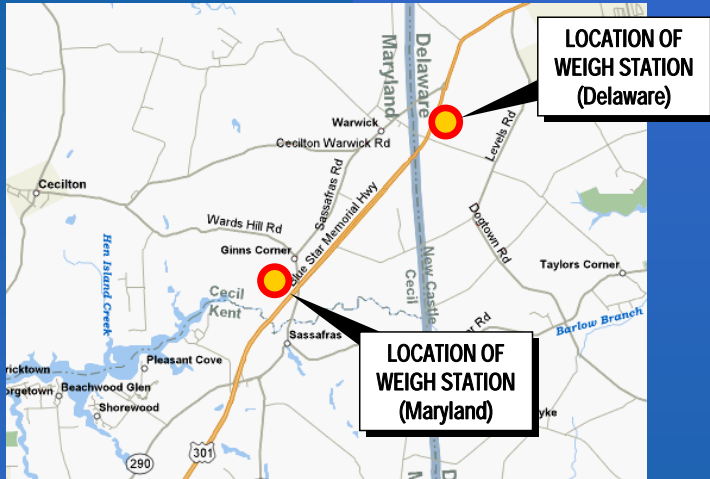
- Locations:

- Potential - Northbound MD 213 north or south of Galena
- Potential - Eastbound Sassafras Rd.
- Potential - Eastbound SR 6 between SR 15 and SR 42

- Timing: Spring 2009

- Enforcement / Operations:

- Ideal pull-off area:
 - ✓ ½ mile downstream from WIM
 - ✓ Safe shoulder width for inspections with parking for out-of-service trucks
 - ✓ At minimum → safe shoulder width for inspections
- MD State Police prefer web-based communication (to access DE WM data)
- DeIDOT concerned with security associated w/ web-based communication
- Capital Cost: \$500K per site
- Operating Cost: \$_____ / year



- DeIDOT - Weigh Station CVISN

- Operational (Spring 2008)

- Accredited/underweight trucks can bypass station at full speed
- Non-accredited/underweight trucks enter station, but can bypass at reduced speed
- Overweight/suspicious trucks can be subject to full inspection (45 +/- minutes)
- DeIDOT has not selected vendor (Competitive bidding to determine)

Issues & Potential Solutions

- US 301 New Toll Facility (US 301, just north of MD/DE Line)

- **Operational:**

- 2015 – 2020, assuming funding is available
- Highway speed EZPass and cash/EZPass lanes or open road tolling - to be determined

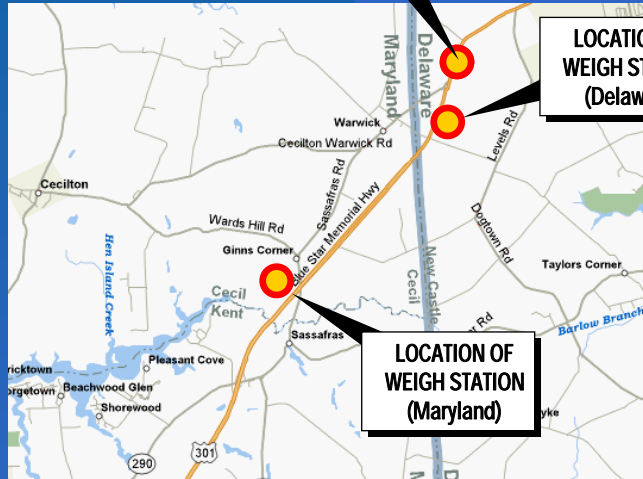
- **Potential Mitigation - Traffic Counts to Determine Diversions**

- Locations:
 - To be determined/refined from previous weigh station count data/conclusions / experience
- Count Timing:
 - 6 months before opening
 - Immediately after opening
 - 6 months after opening
- Traffic count results will be provided to community leaders

POTENTIAL LOCATION OF
NEW US 301 TOLL FACILITY

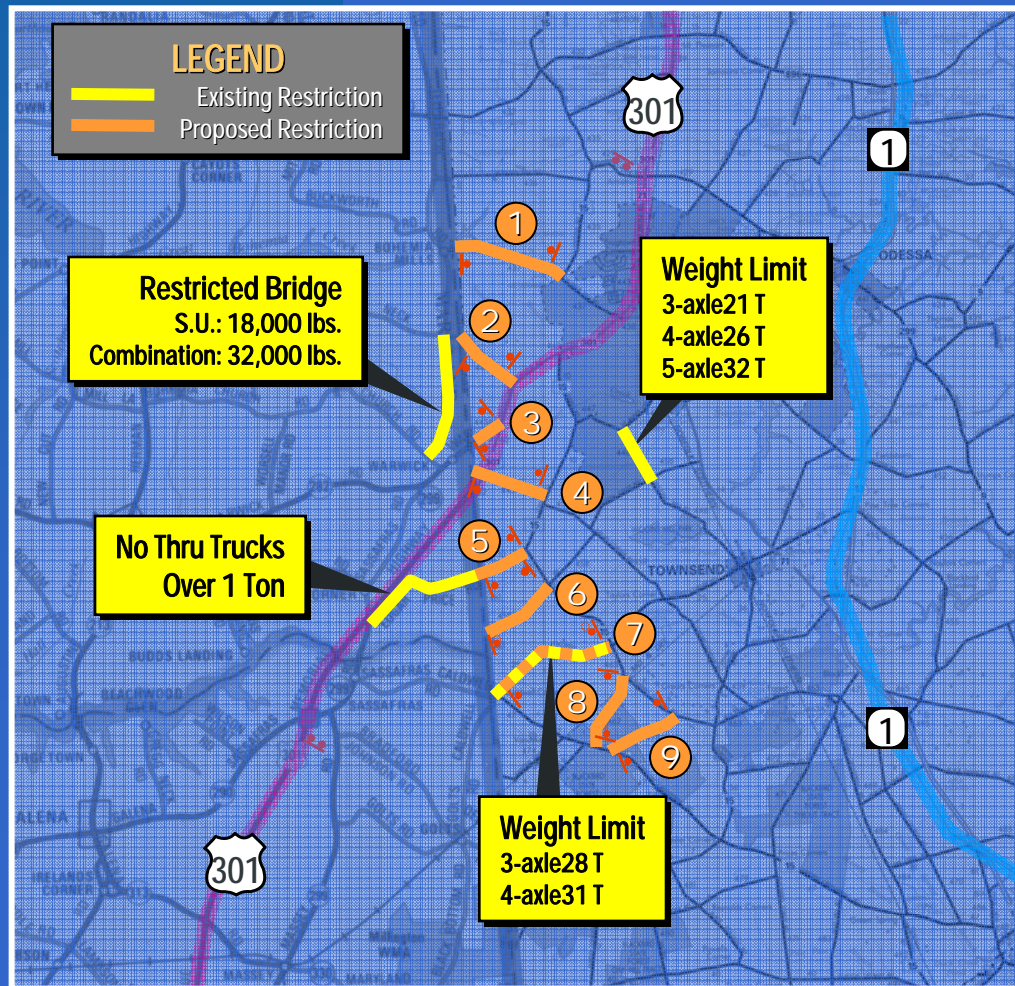
LOCATION OF
WEIGH STATION
(Delaware)

LOCATION OF
WEIGH STATION
(Maryland)



Issues & Potential Solutions

- US 301 New Toll Facility (US 301, just north of MD/DE Line) (continued)
 - Potential Mitigation - Truck Restrictions, Etc.



- Number and location of mitigation measures depends on traffic count results
- Truck Diversions:
 - At minimum, "web" of restricted roads in DE
 - Signing → No Trucks: 5+ axles (except local deliveries)
 - Extend restrictions into MD (need input from SHA)
 - Cameras for axle restriction enforcement?
- Auto Diversions:
 - Appears to be confined to local roads around the toll plaza, through Warwick, MD
 - Larger issue may be high growth in local region:
 - 16,000 new trips by 2030 from Cecilton/Galena

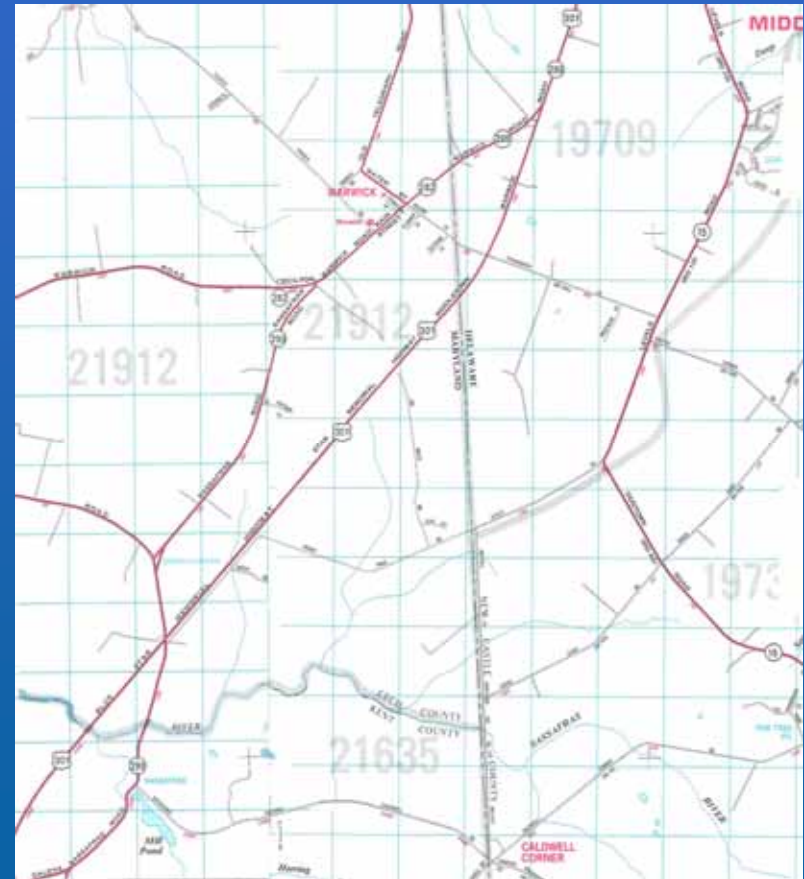
Issues & Potential Solutions

US 301 New Toll Facility (US 301, just north of MD/DE Line)

Issue: Warwick - Auto Diversions - Traffic Speed

Potential Mitigation:

- Truncating Sassafras Road?
- Traffic Calming?





Breakout Groups

- Purpose: To provide additional suggestions to address traffic diversion issues and to provide feedback on the ideas presented
- Format: three breakout groups, each with a facilitator
- Timeframe: 45 minutes
- Assignment: Each group needs to decide on a group spokesperson who will report the results of your discussion to the full Working Group.



Next Steps

- Before the next meeting the Technical Team will develop a draft series of recommendations based on the breakout group reports and subsequent Working Group discussion
- August 9th Working Group meeting will be devoted to review and discussion of the draft recommendations